

Software Engineering Fundamentals - Tutorial

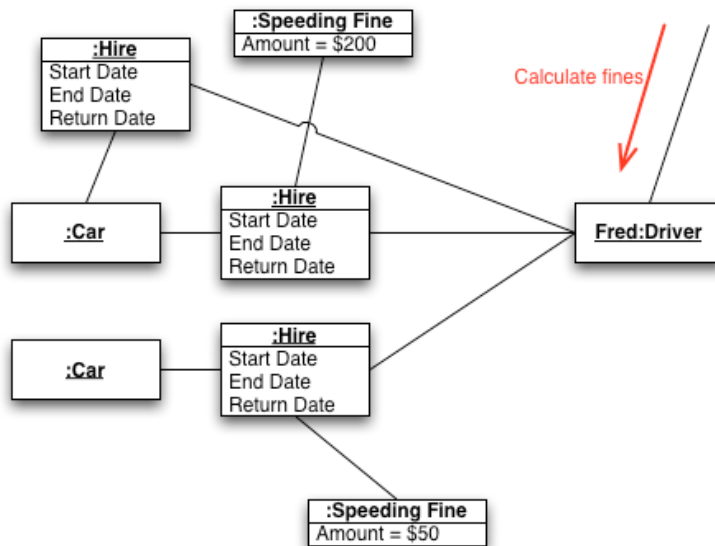
Behaviour - Interactions

Q1

Hire car

a)

Annotate the following object diagram with messages you would need to determine the total value of fines incurred by Fred (assume the first message send is sent to Fred).



b)

A customer rings a hire car company requesting a car to be hired for the weekend. The receptionist who takes the call asks the bookings officer if there are any spare cars for the specified date.

She looks up her booking sheet and finds there are none. The message is passed back to the customer who hangs up.

Draw an interaction diagram for this scenario.

c)

Modify this diagram for the scenario where a car is available, and the customer books it.

Q2

Hospital

Draw an object diagram for the following scenario...

A patient has been admitted to hospital on two separate occasions.

Annotate your object diagram (so it becomes a communication diagram) with messages that could determine how many days the person has been in hospital in total.

A class diagram for this would include multiplicity.

Often a sequence diagram would be for a single scenario, but they can be made more general by using iteration.

Draw a sequence diagram that uses iteration to display the more general behaviour of how to determine how many days the person has been in hospital.